

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A focus detection device comprising:
 - a solid state image sensing device including a first photoelectric conversion element array which photoelectrically converts a first light beam passing through a first area of an exit pupil of a photographing optical system, and a second photoelectric conversion element array which photoelectrically converts a second light beam passing through a second area of the exit pupil which is different from the first area; and
 - a computing device which detects a focus state of the photographing optical system by computing a correlation between a first shading-corrected image signal which is an image signal from the first photoelectric conversion element array and a second shading-corrected image signal which is an image signal from the second photoelectric conversion element array in accordance with a position of a focus detection area in an image sensing frame on the basis of a ratio between a shift amount of a focus detection opening pupil from an optical axis, formed when limitation is imposed caused by being limited by an exit window of the photographing optical system, ~~with respect to an optical axis~~, and a width of the focus detection opening pupil.
2. (Currently Amended) A focus detection method wherein a first light beam passing through a first area of an exit pupil of a photographing optical system is photoelectrically converted by a first photoelectric conversion element array, a second light beam passing through a second area of the exit pupil which is different from the first area is photoelectrically converted by a second photoelectric conversion element array, and a focus state of the photographing optical system is detected by computing a correlation between a first shading-corrected image signal which is an image signal from the first photoelectric conversion element array and a second shading-corrected image signal which is an image signal from the second photoelectric conversion element array in accordance with a position of a focus detection area in an image sensing frame on the basis of a ratio between a shift amount of a focus detection opening pupil from an optical

axis, formed when limitation is imposed caused by being limited by an exit window of the photographing optical system, ~~with respect to an optical axis~~, and a width of the focus detection opening pupil.

3. (Previously Presented) A computer program recorded on a computer-readable medium for causing a computer to execute the focus detection method recited in claim 2.
4. (Cancelled).

The following NEW claims are now presented for consideration by the Examiner:

5. (NEW) The device of claim 1, wherein information utilized to create the shading-corrected image signal is obtained from a digital memory in a photographing lens.